DOCUMENT RESUME

ED 082 816 PS 006 717

AUTHOR Zender, Bryce F., Jr.
TITLE A Commentary on an Unusual Dialogue Between Jean Piaget and Lev S. Vygotsky.
PUB DATE 16 Feb 73
NOTE 14p.; Paper presented at the UAP Conference on Piaget and the Helping Professions (3rd, Los Angeles, California, February 16, 1973)

EDRS PRICE MF-$0.65 HC-$3.29
DESCRIPTORS Association (Psychological); *Cognitive Development; *Cognitive Processes; *Concept Formation; *Elementary School Students; Language Development; Learning Processes; Logical Thinking; Mediation Theory; Perception; *Theories
IDENTIFIERS *Piaget; Vygotsky

ABSTRACT

A dialogue between Jean Piaget and Lev Vygotsky is described and analyzed. Practical implications of the theoretical discussions between the psychologists are pointed out for parents, teachers, and other professionals who deal with children. Essential points of agreement for Piaget and Vygotsky concern the crucial role played by consciousness in determining behavior, and the reliance on the concept of adaptation in the biological sense for studying child development. The theorists' views also converge in many aspects of concept development, as they both see concepts as genuine acts of thought that change qualitatively over time. Areas of differences between Piaget and Vygotsky involve Piaget's "cognitive ego-centrism" and Vygotsky's tendency to overlook the limitations of biosocial adaptation. Also, the relative importance of different concepts in the educational process is disputed. It is concluded that both men were instrumental in revolutionizing the study of language and thought through (1) the development of clinical methods to study children's thinking, and (2) the systematic investigation of children's perception and logic. (DP)

FILMED FROM BEST AVAILABLE COPY

ED 082816

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

THIRD ANNUAL UAP CONFERENCE
ON PIAGET AND THE HELPING PROFESSIONS
February 16, 1973

Edison Auditorium
Hoffman Hall Graduate School of Business
University of Southern California

Title: A Commentary on an Unusual Dialogue Between Jean Piaget and Lev S. Vygotsky

Author: Dr. Bryce F. Zender, Jr.

Address: Assistant Professor
Social Science Area
College of General Studies
Western Michigan University
Kalamazoo, Michigan 49001

Audio-visual Equipment Needed: None

PS 006717

The study of the central mediating processes between the stimulus and response paradigm has not been a matter of urgent concern for American psychologists and educators until the last decade or so. Since that time, the more recent investigations about the brain's neural processes have uncovered new insights about its information functions and this knowledge has turned the attention of investigators to some neglected domains. Subsequently, items like consciousness, attention, personality, and meaning have started to reappear in the literature of research. Likewise, arguments about the propriety of these terms have once again made their appearances.

While returning to the old, American researchers in general and psychologists in particular have also begun simultaneously to rely more and more on the new with their use of the digital computer as a basic research tool. The shift has permitted a choice of theoretical models that is epitomized by the selection of either a stimulus-response connection or a feedback loop for the experiment. In turn, the new reliance upon the computer, instead of animals, for simulating human behavior has also caused psychologists to conceive of the brain as a very complex information system with central mediating processes.

About the same time that American psychologists started to free themselves from the oversimplification of early behaviorism and began to take seriously the work of Jean Piaget,

their counterparts in the Soviet Union were throwing off the shackles of Stalin's ideological tyranny and restoring many of his victims to their rightful place in the history of Soviet science. It was no surprise that among the ranks of "resurrected" scientists was one of the Soviet Union's most brilliant psychologists, Lev S. Vygotsky (1896-1934). Ironically, he had established his reputation as a scholar by resurrecting the formerly discredited idea that the study of consciousness was a function of psychology.

Even though official attempts were made to suppress Vygotsky's findings about the mediation between the stimulus and response, while sanctioning ideologically those of the reflexologists, his unauthorized views still influenced a generation of Soviet psychologists. Besides elaborating Pavlov's conception of a second system of signals that allows man to process symbols, Vygotsky made original contributions in perception, cognition, mental retardation, psycho-pathology, and child development.[1] What is even more remarkable about his tremendous output is that he began his psychological studies relatively late in his life and they were terminated rather abruptly a decade later with his untimely death at 38.

---

[1]As a result of his later research, Pavlov criticized the views of American behaviorists for their oversimplified views about the higher nervous activity and their attempts to explain such processes as learning only within the framework of conditioning. I. P. Pavlov, Izbrannye trudy (Selected Works), M. Usievich, editor, Moscow, 1954, pp. 411 & 412.

Nevertheless, he had achieved in a span of ten years what most other psychologists cannot attain even in a lifetime.

After decades of Stalinist suppression, A. N. Leontiev and A. R. Luria, two of the Soviet Union's outstanding psychologists, edited and prepared for publication much of Vygotsky's research. The response of another generation of Soviet scholars to the resulting books, Language and Thought and The Evolution of Higher Mental Processes, caused the Soviet historians to revise drastically their official views about Vygotsky and his work. In the early sixties, the official historian for Soviet psychological developments, for example cited Vygotsky's research as one of the outstanding milestones in the history of Soviet psychology.[2]

After the publication of an English translation of Language and Thought in 1962, a number of Western scholars became aware at least of the far reaching implications of Vygotsky's research about the intellectual and linguistic development of children. Such an awareness led the noted American psychologist, Jerome Bruner, to express the following view: "But looking at Vygotsky's place in world psychology, his position transcends either the usual functionalism of the Dewey-James variety of the conventional historical materialism

---

[2]A. V. Petrovsky, Istoriya Sovetskoi psikhologii (The History of Soviet Psychology), Ouotaion translated from the Russian by B. F. Zender, Moscow: Education, 1967, p. 355.

of Marxist ideology. Vygotsky is an original."[3]

Another even more significant Western appraisal was offered by the Swiss psychologist, Jean Piaget, whose early works were critically examined by Vygotsky. Upon reading his appraisal, the Western world's foremost authority on the central mediating processes of children made a decision which suggests somewhat the import of his Soviet counterpart's views. Almost a quarter of a century later, Piaget decided to reply in detail to the comments of Vygotsky.

The primary purpose here, therefore, is the substance of the unusual dialogue between these two brilliant psychologists. In addition to the description and analysis, there is another secondary goal for the remaining pages. It is to point out the practical implications of the theoretical discussions for parents, teachers, and other professionals who are concerned with the development of children. In short, the major aim for this paper is to indicate where the theoretical views of Piaget and Vygotsky crossed paths yesterday and to suggest what this possibly means in practice for us today.

Only two futher points need to be made in introducing this commentary on the converging views of the Soviet and Swiss psychologist. Though these men disagree with each other

---

[3]Lev S. Vygotsky, Thought and Language, Edited and translated by Eugenia Hanfmann and Gertrude Vakar, Cambridge: M.I.T. Press, Massachusetts Institute of Technology, 1965, p. vi.

in regards to specific psychological viewpoints, they agree with each other about two very essential points. First, both Piaget and Vygotsky begin with the premise that consciousness with all its psychological functions and physiological processes plays a crucial role in determining behavior. Second, the starting point for their discussion is not an ideological rift that places them in either the camp of modern socialism or capitalism, but is one of mutual respect for each other's intellectual ability.

Let us now examine their converging theories in detail. Then, after examining the theoretical constructs, let us look back and see what practical implications were uncovered by the examination.

Vygotsky and Piaget have a similiar starting point for their theories of cognition in that they "locate the beginning of thinking in the context of adaptation--in a more and more biological sense."[4] Both theorists agree that "action was there first; the word is the end of development, crowning the deed."[5] Also, they see the child involved in some adaptive effort in which there is an exchange between him and his environment.

---

[4]Jean Piaget, Comments on Vygotsky's Critical Remarks. Cambridge: M.I.T. Press, Massachusetts Institute of Technology 1962, p. 2.

[5]Vygotsky, op. cit., p. 153.

PS 006717

Beneath their agreement about the adaptation of the child and the inception of thought in his actions, there are a series of differences that also characterize these theories. On the one hand, Piaget believes that "one must guard against an excessive bio-social optimism into which Vygotsky sometimes seems to fall."[6] On the other hand, Vygotsky takes issue with Piaget's conception of cognitive egocentrism which "designates the initial inability to decenter, to shift the given cognitive perspective."[7]

Let us, as the Chinese say, move our chairs closer to the fire and see what they are saying. Piaget's criticism of Vygotsky's optimism is particularly important because it serves as a very useful reminder that adaptation is not always successful and his its limitations. But the Swiss psychologist's conception of cognitive egocentrism is rather inadequate for expressing the idea "that the progress of Knowlege never proceeds by a mere addition of items or of new levels, as if richer knowlege were only a complement of the earlier meager one; it requires also a perpetual reformulation of previous points of view by a process which moves backwards as well as forward continually correcting both the initial systematic errors and those arising along the way." As

---

[6]Piaget, op. cit., p. 2.

[7]Ibid., p. 3.

[8]Ibid., p. 3.

Piaget himself admits, the use of the term, "cognitive egocentrism," was "no doubt a bad choice."[9]

What is particularly significant about the Russian's critique of the Piagetian use of the term, egocentrism, is not that Vygotsky was right, but that his criticism led Piaget to clarify his conceptiona and to rely more on the developmental law of decentering. This is a rather well defined principle which explains how one differentiates his own point of view from the other possible ones. What is even more important about Piaget's clarification is that it includes suggestions for overcoming egocentrism or, as the followers of Vygotsky might state, facilitating decentering. According to Piaget, the way to foster this process is "cooperation with others (on the cognitive plane) that teaches us to speak 'according' to others and not simply from our own point of view."[10]

Another critical point of convergence for the two theorists is their views about the internal development of concepts in the child's consciousness and two conceptual spheres. Both men believe that concepts have an inward history because they undergo development. This viewpoint is perhaps best stated by Vygotsky who sums it up in the following manner:

> As we know from investigations of the process of concept formation, a concept is more than the sum of certain associative bonds formed by memory, more than

---

[9]Ibid., p. 3.

[10]Ibid., p. 8.

> a mere mental habit; it is a complex and genuine act of thought that cannot be taught by drilling but can be accomplished only when the child's mental development itself has reached the requisite level.[11]

Besides converging on levels of mental development, Vygotsky and Piaget draw a line "between the child's ideas of reality developed mainly through his own mental efforts and those that were decisively influenced by adults."[12] The first group of concepts are designated spontaneous and the second as nonspontaneous. Furthermore, the two theorists agree that unfortunately "our knowledge of both is suprisingly scanty."[13]

Here, just like the starting points for their respective theories, there are some profound differences beneath the surface of their agreement. One of the most obvious divergences is their emphasis on the role of the different concepts in instructing the child. It seems that Vygotsky was more concerned about the development of scientific concepts. In his studies, he attempted essentially to find answers for such questions as the following: "What happens in the mind of the child to the scientific concepts he is taught in school? What is the relationship between the assimilating of information and the internal development of a scientific concept in the child's consciousness."[14]

---

[11]Vygotsky, op. cit., p. 82.

[12]Ibid., p. 84.

[13]Ibid., p. 82.

[14]Ibid., p. 82.

In contrast, Piaget is more concerned with spontaneous concepts and their role in instruction. His rationale for this concern stems from the following premise: "I have . . . insisted that formal education could gain a great deal, much more than ordinary methods do at present, from a systematic utilization of the child's spontaneous mental development.[15] It is at this point that the views of Piaget and Vygotsky begin to merge again.

Both men believe "that nonspontaneous concepts, too, receive an 'imprint' of the child's mentality in the process of their acquisition and that an 'interaction' of spontaneous and learned concepts must therefore be admitted."[16] Thus these psychologists agree "that the essential task of child psychology was to study the formation of scientific concepts in following step by step the process unfolding under our eyes."[17]

Here, again, there is at least one differnce which force their theories to diverge from each other. The divergence concerns the interaction of spontaneous and nonspontaneous concepts. This interaction, according to Piaget, is more complex than Vygotsky believes. In order to elaborate his

---

[15]Piaget, op. cit., p. 9.

[16]Ibid., p. 9.

[17]Ibid., p. 9.

criticism, Piaget explains the problem in the following way:

> In some cases, what is transmitted by instruction is well assimilated by the child because it represents in fact an extension of some spontaneous construction of his own. In such cases, his development is accelerated.[18]

In addition to the preceding criticism, Piaget also reminds his Soviet counterpart of another grim possibility:

> But in other cases, the gifts of instruction are presented too soon or too late, or in a manner that precludes assimilation because it does not fit in with the child's spontaneous constructions. The child's development is impeded or even deflected into barrenness, as so often happens in the teaching of exact sciences.[19]

Thus Vygotsky's oversimplification of the interaction between spontaneous and nonspontaneous concepts is, according to Piaget, fraught with dangerous consequences.

In retrospect, one could very easily criticize these psychologists for displaying throughout their commentary an almost passionate loyalty for the theoretical and a cold rejection of the practical. Interesting as this type of criticism could be, it would probably lead to a rehashing of old issues and most likely shed more heat than light on the processes of cognition. Perhaps more germane for American educators and psychologists is that facts are always examined in the light of some theory. This is what is most practical about Piaget and Vygotsky's efforts to elaborate the similiarities and differences in their respective systems.

---

[18]Ibid., p. 9.

[19]Ibid., p. 10.

Like many other great discoveries, many of their ideas are simple to the point of seeming self-evident. Both of the theorists viewed the child not as a miniature adult and his mind not as the mind of an adult on a small scale. Behind this truth, for which Piaget and Vygotsky provided ample experimental data, stands another simple idea--the idea of evolution which lights up their studies brilliantly.

At the same time, it is important to remember that even though their empiricism is not apparent in their critiques of each other, their forte is the unearthing of new facts, their painstaking analysis, and classification. Behind their theoretical discussions are an avalanche of facts that has opened new vistas and added to previous knowledge. In short their investigations have given us a rather detailed, real life picture of the child's central mediating processes.

To sum up this picture: the word of the child is seen as the end of development, crowing the deed; the child appears as an adaptive organism decentering his cognitive perspectives; and this process is fostered by cooperation with others on the cognitive plane.

Moreover, any adult intervention at the various levels of mental development, according to their composite photograph of the child, can be successful only when the child's mental development itself has reached the requisite level. Briefly, then, Piaget and Vygotsky believe that formal instruction

must utilize systematically the child's spontaneous mental development. Though they disagree about the complexity of the interaction between spontaneous and nonspontaneous concepts, its proper utilization can lead to accelerated mental development, but its improper usuage can impede the development of the child.

In short, modern psychologists and educators owe a great deal to Jean Piaget and Lev Vygotsky. It is not an exaggeration to say that they revolutionized the study of child language and thought. They developed clinical methods of exploring children's ideas which have since been widely used. The Swiss and Russian psychologists were among the first to investigate child perception and logic systematically. Moreover, they brought to their subject a bold approach. Instead of listing the deficiencies of child reasoning compared with that of adults, both researchers concentrated on the distinctive characteristics of child thought, on what the child has rather than on what the child lacks. Through their efforts to free the child from adult domination, Vygotsky and Piaget discovered for all men the means whereby they can use their symbolic conceptions of reality to mediate between their inner world and the outer one. Thus ends this study about two psychologist, a Russian and a Swiss, whose studies of children freed all men from the rigidity of stimulus-response theory.

SUMMARY OF A COMMENTARY ON AN UNUSUAL DIALOGUE BETWEEN JEAN PIAGET AND LEV S. VYGOTSKY

In short, modern psychologists and educators owe a great deal to Jean Piaget and Lev Vygotsky. It is not an exaggeration to say that they revolutionized the study of language and thought. They developed clinical methods of exploring children's ideas which have since been widely used by a host of professionals. The Swiss and Russian psychologist were among the first to investigate child perception and logic systematically. Moreover, they brought to their subject a bo approach. Instead of listing the deficiencies of child reasoning compared with that of adults, both researchers concentrated on the distinctive characteristics of child thought, on what the child has rather than on what the child lacks. Through their efforts to free the child from such adult domination, Vygotsky and Piaget discovered for all men the means whereby they can use their symbolic conceptions of reality to mediate between their inner world and the outer one. More importantly, the Russian and Swiss psychologist freed all men from the rigidity of stimulus-response theory.

This study is an attempt to describe and analyze the substance of an unusual dialogue between these two brilliant psychologists. In addition to the description and analysis, some of the practical implications of their theoretical discussions are pointed out for parents, teachers, and other professionals who are concerned with the development of the children. Briefly then, the study hopefully indicates where the theoretical views of Piaget and Vygotsky crossed paths yesterday and suggests what this possibly means in practice for us today.